

BLANK PAGE



Indian Standard



SPECIFICATION FOR GAUGING MEMBERS FOR GO AND NO GO SCREW PLUG GAUGES AND SCREW CHECK PLUG GAUGES FOR ISO METRIC SCREW THREADS (SIZE RANGE ABOVE M120 UP TO AND INCLUDING M200)

- 1. Scope Covers requirements for gauging members for GO and NO GO screw plug gauges for ISO metric internal threads and GO and NO GO check plug gauges for GO and NO GO solid screw ring gauges in the size range above M120 up to and including M200 for ISO metric screw threads according to IS: 4218 (Part I to VI) 'ISO metric screw threads'.
- 2. Material Shall be as prescribed in IS:7018 (Part I) 1933 'Technical supply conditions for gauges: Part I General' (first revision).
- 3. Dimensions Shall be as specified in Table 1.
- **4. Gauging Dimensions and Thread Profiles** Shall conform to IS: 2334-1975 'Gauging practice for ISO Metric screw threads (first revision)'.
- 5. Dirt Grooves Dirt grooves shall be provided where necessary for GO members above 120 mm up to 200 mm. The dimensions of the dirt grooves with 'U' shape shall have width 4 mm and the depth shall be such that it clears the minor diameter of the plug gauges.

6. Designation

6.1 Gauging members for screw plug gauges shall be designated by the name of the gauging member GO or NO GO, nominal diameter, pitch and the tolerance class according to IS: 4218 (Part IV)-1976 ISO metric screw threads: Part IV Tolerancing system'. If the pitch is not indicated in the designation, coarse pitch shall be implied.

Example

GO or NO GO gauging members of screw plug gauges of nominal diameter 125 mm, pitch 3 mm and tolerance class 6H shall be designed as:

GO Gauging-Member M125 imes 3 — 6H IS : 10685

NO GO Gauging Member M125 imes 3 — 6H IS: 10685

6.2 GO or NO GO screw check plug gauging members for solid GO screw ring gauge of nominal diameter 125 mm, pitch 3 mm, and tolerance class 6 g, shall be designated as:

GO Gauging Member MI 25 \times 3 - 6 g CP GO Ring IS : 10685

and

NO GO Gauging Member MI25 \times 3 - 6 g CP for GO Ring IS : 10685

6.3 GO or NO GO screw check plug gauging member for solid NO GO screw ring gauge of nominal diameter 125 mm, pitch 3 mm and tolerance class 6 g, shall be designated as:

GO Gauging Member M125 imes 3 - 6 g CP for NO GO Ring IS : 10685

and

NO GO Gauging Member M1 125 imes 3 - 6 g CP for NO GO Ring IS : 10685

6.4 If the dirt groove is provided for GO screw plug gauge of nominal diameter 125 mm, pitch 3 mm and tolerance class 6H, it shall be designed as:

GO Gauging Member M125 imes 3 — DG IS : 10685

Adopted 29 September 1983

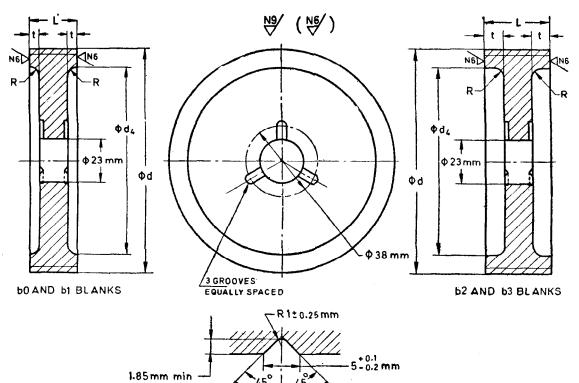
C February 1984, ISI

Gr 2

TABLE 1 DIMENSIONS FOR GAUGING MEMBERS FOR GO AND NO GO SCREW PLUG GAUGES AND SCREW CHECK PLUG GAUGES (SIZE RANGE ABOVE M120 UP TO AND INCLUDING M200)

(Clause 3)

All dimensions in millimetres.



DETAIL OF GROOVE

L GO = 8 pitches minimum

L NO GO = 4 pitches minimum

90°

Nominal Diameter		*Han- dle No.	Rec- ess Dia- meter	R	Blank b0 (Short Series)		Blank b1 (Medium Series)		Blank b2 (Long Series)			Blank b3 (Extra Long Series)				
Ab- ove	Up to and Inclu- ding		d ₄		Pitches for GO Gauges	L	t	Pitches for GO Gauges	L	t	Pitches for GO Gauges	L	t	Pitches for GO Gauges		t
120	140	9	100	5	2	16	5	3	25	5	4	35	10	6	50	12
140	160	9	120	5	2	16	5	3	25	5	4	35	10	6	50	12
160	180	9	140	5	2	16	5	3	25	5	4	35	10	6	50	12
180	2 0 0	9	160	5	2	16	5	3	25	5	4	3 5	10	6	50	12

*IS: 5388-1983 'Handles for plug gauges plain and threaded (second revision).

IS: 10685 - 1983

7. General Requirements

- 7.1 Other requirements for gauging members not covered in this standard, shall conform to IS:7018 (Part 1) 1983 'Technical supply conditions for gauges: Part I General' (first revision).
- 7.2 The gauge handles shall be according to IS:5388-1983 'Handles for plug gauges, plain and threaded (second revision)'.
- 8. Marking Shall be in conformity with IS: 7018 (Part I) 1983.
- 8.1 ISI Certification Marking Details available with the Indian Standards Institution.

EXPLANATORY NOTE

Gauging members for screw plug gauges GO and NO GO members have been combined to cover the requirements of GO and NO GO gauging members in one standard.

The gauging members in this range are of trilock type. This extends the interchangeable end system to the larger size.

An additional advantage of this type of gauge is that the gauging members can be reversed when the entering end is worn out. The wedge shaped prongs on the handle are engaged with corresponding grooves in the gauging members by a single screw providing a self centring support with a positive lock and a degree of rigidity equivalent to that of a solid gauge.

The requirements of the gauging members for size range M1 to M 40 and from above M40 up to and including M120 have been covered in separate standards.